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Exploring Indo-Japan Collaboration on Semiconductors

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Asia's two largest democracies, India and Japan, have been bolstering their strategic partnership and cooperating regarding their mutual concerns and interests. Recently, on July 27, Japan's Foreign Minister, Yoshimasa Hayashi, visited New Delhi and met India's External Affairs Minister, Dr S. Jaishankar, for the 15th India-Japan Foreign Ministers' Strategic Dialogue. This meeting paved the way to discuss and review the progress in their bilateral relationship under the India-Japan Special Strategic and Global Partnership. Hayashi's primary focus on visiting India has been to address Japan's cooperation with the Global South, the new Indo-Pacific Policy unveiled by Japan's Prime Minister Fumio Kishida in March this year, and potential cooperation regarding semiconductors. The new Indo-Pacific Policy includes a commitment of US \$75 billion in investment by Japan for security and infrastructure development in the Indo-Pacific region by the year 2030.

Hayashi's visit highlighted the need to realise Kishida's vision of a free and open Indo-Pacific and also maintain the rules-based international order, as Kishida also emphasised that India is indispensable in Japan's vision of a free and open Indo-Pacific. Furthermore, India-Japan cooperation for the future of the Indo-Pacific would promote their partnership in varied fields of security, politics, development cooperation, economy, people-to-people exchanges, and also in multilateral forums such as the Quad. The two nations have been widely cooperating on infrastructure and connectivity initiatives around the Indo-Pacific region, and Kishida proposed the Bay of Bengal-Northeast Industrial Value Chain Concept, which is an initiative to attract several manufacturing industries to India's Northeastern provinces. During PM Kishida's visit to India in March this year, he declared Japan's intent to use its Official Development Assistance (ODA), expand it, and further revise the Development Cooperation Charter. Both ministers discussed and explored ways of cooperating within multilateral frameworks, which include the Quad and other trilateral initiatives within like-minded countries in the Indo-Pacific region.

India-Japan Collaboration on Semiconductors

One of the significant recent highlights of India-Japan bolstering their partnership is exploring the potential collaboration between India and Japan in areas such as semiconductors, establishing powerful supply chains, and critical emerging technologies, which was also discussed during the foreign ministers' meeting. During the pandemic in 2021, India, Japan, and Australia unveiled the Supply Chain Resilience Initiative (SCRI) to counter China's moves and dominance of supply chains in the Indo-Pacific region. The initiative aims to enhance supply chain resilience to eventually maintain inclusive growth in the region. The talks between Indian and Japanese officials aimed at achieving a maximum target of US \$35.9 billion Japanese investment in India by the year 2027.³

India aspires to establish a domestic chipmaking industry, which faced a major setback recently when the electronics giant Foxconn withdrew from a US \$19.5 billion semiconductor joint venture with the Indian mining conglomerate Vedanta Ltd.⁴

India and Japan also signed a Memorandum of Understanding (MoU) on the development of semiconductors, which would include manufacturing, design, and equipment research. This MoU follows certain investments from Micron Technology, which also announced setting up a semiconductor unit in India with an investment of approximately US \$2.75 billion.⁵ The Applied Materials company would be setting up a collaborative centre for R&D with an investment of around \$400 million.⁶ Moreover, India has placed great emphasis on working towards developing a robust chipmaking sector under its self-reliance strategy for ensuring stable supply chains. India has also launched financial incentives of around 50 per cent of the project costs to support the semiconductor and manufacturing projects. Japan's Foreign Minister Hayashi affirmed that Japan will improve its investment environment with the help of Japanese firms and companies operating in the country. Japanese businesspeople wish to create a transparent and stable business environment in India. However, in the past, Japanese businesses in India created issues related to challenges in infrastructure development.

Japan foresees growing potential opportunities for operating Japanese business in India for investment and trade purposes. In recent years, Japanese investments in India have increased but remain low in comparison to the country's total outward foreign direct investment (FDI). When Kishida visited India in March 2022, both India and Japan set a target of working on increasing Japan's public and private investments in India to around 5 trillion yen over the course of five years.

Way Forward

Russia's invasion of Ukraine has led to the disruption of the global supply of raw materials needed to complete products like cars and computer chips. India has therefore been encouraging Japanese companies to invest in sectors such as telecommunications, automobiles, and chemical batteries, to name a few. In the strategic dialogue between the two Foreign Ministers, both leaders discussed that it is vital to deepen a mutual understanding of Japanese companies' viewpoints on the Indian business environment, which would help in expanding future investment opportunities. Both countries should focus on improved export tariff regulations and further incentives for export promotion. Japanese companies have also been expanding their presence in Southeast Asia to reduce their dependency on China.

On the security front, Japan considers India an indispensable partner in achieving a free and open Indo-Pacific region, as was widely discussed during the Foreign Ministers' meeting. Both nations have been exploring ways to cooperate to counter China's expansionist behaviour in the Indo-Pacific region. The strategic dialogue reaffirmed the commitment of both India and Japan to deepen their special strategic and global partnership.

Everyone needs a reliable semiconductor supply chain, and India and Japan are key players in this regard. The current state of the world presents India with the chance to use its geopolitical significance to advance its technological objectives with Japanese aid. India and Japan are both actively looking for ways to work together with allies and partners. As a result, they are at a crossroads in their pursuit of semiconductor technology.

NOTES:

¹ Japan's foreign minister Hayashi set for two-day India visit, Livemint, July 27, 2023, https://www.livemint.com/news/world/japans-foreign-minister-hayashi-set-for-two-day-india-visit-11690447954366.html. Accessed on July 28, 2023.

² Kei Hakata & Brendon J. Cannon, Japan's new Indo-Pacific: A guiding perspective to shape worldviews, *Observer Research Foundation*, May 03, 2023, https://www.orfonline.org/expert-speak/japans-new-indo-pacific-a-guiding-perspective-to-shape-worldviews/. Accessed on July 28, 2023.

³ India and Japan look to collaborate in building semiconductors and resilient supply chains, *Newsday*, July 28, 2023, https://www.newsday.com/business/india-and-japan-look-to-collaborate-in-building-semiconductors-and-resilient-supply-chains-ucok3zud. Accessed on July 29, 2023.

⁴ Ibid

⁵ Melissa Cyrill and Yashoda Kapur, India's Semiconductor Sector: Tracking Government Support and Investment Trends, *India Briefing*, July 31, 2023 https://www.india-briefing.com/news/setting-up-a-semiconductor-fabrication-plant-in-india-what-foreign-investors-should-know-22009.html/. Accessed on August 01, 2023.

⁶ Ibid